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cont'd
by curing the curable, high refractive index, polyorganosil-
5 oxane composition of claim ~~23~~²⁹.

~~22~~²³₃₆. An elastomeric, optically clear, high refrac-
tive index lens having superior postfolding optical resolu-
tion recovery, said lens comprising a polyorganosiloxane
obtained by curing the curable, high refractive index, poly-
5 organosiloxane composition of claim ~~34~~²⁴.--

REMARKS

Claims 3, 4, 9, 14, 18, 19, and 21-36 are present in this ap-
plication. Claim 17, which was indicated by the Examiner to be al-
lowable, has been cancelled and rewritten as new claim 24.

Claims 1, 2, 5-8, 10-13, 15-17 and 20 have been cancelled as
redundant in view of the newly added claims and the indicated al-
lowability of claim 17 (now claim 24). Claim 24 includes the ter-
polymer of dimethylsiloxane, diphenylsiloxane, and methylhydrosil-
oxane, in combination with the tetrakis(dimethylsiloxy) silane
crosslinker, which combination the Examiner has found to be not
suggested by the cited references, particularly Reich et al., and
has indicated to be allowable.

Claims 21-24, 33 and 34, the only independent claims present
in this application, have been written to particularly point out
and distinctly claim the subject matter which Applicants regard as
the invention. Particularly, as suggested by the Examiner, both
the types and the bases for the amounts specified in the claims
with respect to the composition of the vinyl terminated copolymer
resins have been positively recited. Thus, the weight percent has
been defined as based on the total amount of the first and second
vinyl terminated copolymer resins. As now claimed, it is submitted
that all of the claims satisfy the requirements of 35 U.S.C. § 112,
second paragraph, with regard to indefiniteness, and the Examiner
is accordingly urged to withdraw this rejection.

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The claims have also been rejected under 35 U.S.C. § 103 as being unpatentable over Jensen. Jensen, however, utilizes a vinyl-specific peroxide with liquid curable organosiloxane compositions. As stated by the patentee:

The presence of a vinyl-specific peroxide characterizes the compositions of this invention and is considered responsible for the excellent recovery properties, particularly recovery from long term compression, of cured elastomers prepared from these compositions is the vinyl-specific peroxide. (column 4, lines 1-6.)

Applicants' high refractive index, curable polyorganosiloxane compositions, on the other hand, are useful for fabricating optically clear, high refractive index intraocular lenses having superior postfolding optical resolutions recoveries and containing no peroxide. As can be seen from Applicants' Table I, at page 17 of the specification, the high refractive index, curable polyorganosiloxane compositions of Applicants' invention are characterized by having an optical efficiency, postfolding, for a 30-diopter lens, of 64% in air, and, for a 15-diopter lens, of 90% in air and also 90% in aqueous solution. The Jensen compositions are not characterized by postfolding optical efficiencies as realized by Applicants. Rather, the Jensen compositions are described as possessing desirable properties of recovery from compression.

The improved postfolding optical resolution of Applicants' lenses is also demonstrated in Table II, on page 21 of Applicants' specification, wherein it can be seen that, using 42 grams of low molecular weight, vinyl terminated polyorganosiloxane and 58 grams of high molecular weight, vinyl terminated polyorganosiloxane and various crosslinking reagents, as well as various quantities of fumed silica, ranging from 8 grams to 20 grams, postfolding optical resolutions of 64% and 71.6% are obtained.

Table III, on page 24 of Applicants' specification, compares various properties of intraocular lenses prepared using the compositions of the present invention with commercial intraocular lenses. The intraocular lenses prepared according to the present



invention are exemplified by using 52 parts of high molecular weight, vinyl terminated dimethyldiphenylsiloxane and 48 parts of low molecular weight, vinyl terminated dimethyldiphenylsiloxane with 13 parts per 100 parts resin of fumed silica. The postfolding resolution efficiencies of the intraocular lenses prepared using the compositions of the present invention were found to give greater than 90% values for low diopter lenses and 72% values for high diopter lenses. Both values were considerably higher than those obtained using the commercially available intraocular lenses which did not utilize Applicants' claimed compositions.

It is submitted that the results shown in Applicants' examples in fact demonstrate new and unexpected results, with regard to pre-folding optical resolution and postfolding optical resolution, and that these results are not suggested by the teachings of Jensen, which are directed to compositions with improved recoveries following prolonged compression, such as would be desirable for use as gaskets and other types of seal-forming materials (column 2, line 67, to column 3, line 5).

The Examiner has stated with respect to claims 19 and 20 that it is well-known in the art to use silicone elastomers as lenses. Table III of Applicants' Example 6 compares intraocular lenses prepared from polyorganosiloxane compositions of the present invention with two commercial silicone elastomer, foldable intraocular lenses. However, as pointed out above, the compositions of Jensen possess properties that are more suited to utilization in gaskets and seal-forming materials than in intraocular lenses.

Although the Examiner has alleged that Jensen teaches the inclusion of UV absorbers at column 9, line 45, the indicated portion of the Jensen reference reads as follows:

Typical additives include but are not limited to pigments, dyes, adhesion promoters, flame retardants, heat and/or ultraviolet light stabilizers and resinous organosiloxane copolymers to enhance the physical properties of the cured elastomer. (column 9, lines 43-47, emphasis added.)

Thus, Jensen does not teach the inclusion of UV absorbers but rather ultraviolet light stabilizers. Applicants' use of UV absorbers is explained in the specification at page 11, lines 13-21, wherein it states:

Optionally, the polyorganosiloxane copolymer compositions of the present invention further include an ultraviolet (UV) absorbing compound which preferably has a high absorptivity of ultraviolet radiation for wavelengths up to about 405 nm. When incorporated in organosiloxane compositions used to fabricate optical materials utilized in ophthalmic applications, these UV absorbing compounds are a safeguard against excessive UV radiation exposure to the retina and other ocular structures.

Materials which stabilize against decomposition by ultraviolet radiation, i.e., ultraviolet light stabilizers and the UV-absorbing compounds of Applicants' invention, are distinctly different, both in composition and utility. Thus, it is submitted that Jensen does not teach or suggest the inclusion of UV absorbers, as alleged by the Examiner. Accordingly, the Examiner is urged to reconsider the rejection of claims 19 and 20, now claims 19, 25-27, 35, and 36.

In another respect, particularly with regard to new claims 33-36, Jensen's vinyl-specific peroxide is specifically excluded by utilizing the terminology "consisting essentially of". Therefore, claims 33-36 are clearly allowable over Jensen for all of the reasons given above; and favorable consideration of the allowability of these claims, as well as claims 3, 4, 9, 14, 18, 19, and 21-32, is urged.

The Examiner has also rejected the claims under 35 U.S.C. § 103 as being unpatentable over Jensen in view of Reich et al. As pointed out above, Jensen not only fails to teach Applicants' specific UV absorbers, but in fact fails to teach any UV absorber. Jensen's ultraviolet light stabilizers are not generally recognized as UV absorbers and are present for an entirely different purpose than the UV absorbers of Applicants' high refractive index, curable polyorganosiloxane compositions.

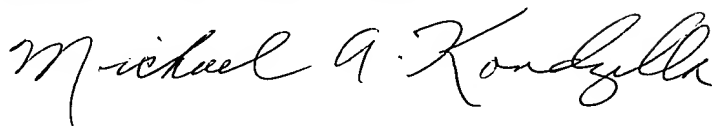
It is not at all apparent why one having ordinary skill in the art would have been motivated to add a UV absorber to the compositions of Jensen since Jensen is merely interested in stabilizing against deterioration by ultraviolet radiation, whereas Applicants' concern is with the safety of patients using the intraocular lenses fabricated with the high refractive index, curable polyorganosiloxane compositions of the present invention. The combination of the Reich et al. reference with the Jensen reference is not suggested by either reference since Jensen does not suggest the use of ultraviolet light absorbers in silicone compositions, and Reich et al. merely teach the use of a silicone elastomer to which an ultraviolet light-absorbing component is covalently attached.

Furthermore, Reich et al. do not teach or suggest the provision of elastomeric, optically clear, high refractive index lenses having superior postfolding optical resolution recoveries, as in Applicants' claims 19, 25-27, 35 and 36.

Accordingly, it is submitted that the combination of Jensen with Reich et al. does not render obvious Applicants' claimed high refractive index, curable polyorganosiloxane compositions useful for fabricating intraocular lenses or Applicants' elastomeric, optically clear high refractive index lenses, having superior postfolding optical resolution recoveries. Therefore, the Examiner is urged to reconsider the rejection of the claims as unpatentable over Jensen in view of Reich et al. and to give favorable consideration to the amended and newly submitted claims.

In view of the foregoing amendments and discussion, it is believed that all the claims are now in condition for allowance and such action is earnestly solicited.

Respectfully submitted,



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